

## TENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>SOPC/P28436PC</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/GB 03/ 02459</b>	International filing date (day/month/year) <b>06/06/2003</b>	(Earliest) Priority Date (day/month/year) <b>07/06/2002</b>
Applicant <b>SOPHION BIOSCIENCE A/S</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

## 4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

## 5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

## 6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1  
☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/GB 03/02459

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/10 C12Q1/68 G01N33/50 C12M1/34

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C12Q G01N C12M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, CAB Data, SEQUENCE SEARCH, BIOSIS, EPO-Internal, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02 24862 A (SCHMIDT CHRISTIAN ;CYTION S A (CH)) 28 March 2002 (2002-03-28) page 31, line 18 - line 22 page 36, line 12 - line 14 page 72, line 19 -page 73, line 11; claims 1-10	1-4,6-15
Y	WO 02 04943 A (SQUIBB BRISTOL MYERS CO) 17 January 2002 (2002-01-17) page 23, line 20 -page 24, line 25; claims 91,98-120 page 26, line 15 -page 27, line 4 page 27, line 27 -page 29, line 4 page 29, line 16 - line 20	1-4,6-9, 11-15
Y	WO 99 64582 A (INTROGENE BV) 16 December 1999 (1999-12-16) the whole document	1-4,6-9, 11-15
-/-		

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

\*A\* document defining the general state of the art which is not considered to be of particular relevance

\*E\* earlier document but published on or after the international filing date

\*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

\*O\* document referring to an oral disclosure, use, exhibition or other means

\*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

28 October 2003

Date of mailing of the international search report

03/11/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Hornig, H

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/GB 00/02459

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01 73000 A (MAXYGEN INC ; KEENAN ROBERT J (US); MINSHULL JEREMY (US); STEMMER W) 4 October 2001 (2001-10-04) the whole document	1-4, 6-9, 11-15
Y	EP 1 143 013 A (WARNER LAMBERT CO) 10 October 2001 (2001-10-10) page 7, line 2 - line 11 page 8, line 33 - line 34	1-4, 6-9, 11-15
A	DE 199 50 385 A (MAX PLANCK GESELLSCHAFT) 3 August 2000 (2000-08-03) the whole document	
A	WO 97 27212 A (RIGEL PHARMACEUTICALS INC) 31 July 1997 (1997-07-31) the whole document	
A	WO 02 29402 A (SOPHION BIOSCIENCE AS) 11 April 2002 (2002-04-11) cited in the application the whole document	
A	WO 01 59447 A (REED MARK A ; UNIV YALE (US); KLEMIC JAMES F (US); KLEMIC KATHRYN C) 16 August 2001 (2001-08-16) the whole document	
A	WO 01 25769 A (SOPHION BIOSCIENCE AS) 12 April 2001 (2001-04-12) the whole document	

## INTERNATIONAL SEARCH REPORT

International Application No.  
PCT/GB 03/02459**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 5-complete, (6-15)-partially  
because they relate to subject matter not required to be searched by this Authority, namely:  
Rule 39.1(v) PCT - Presentation of information.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)**

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; It is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 03/02459

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0224862	A	28-03-2002	All 8747201 A WO 0224862 A2 US 2003052002 A1 US 2003098248 A1 US 2003146091 A1 US 2002104757 A1 US 2002144905 A1	02-04-2002 28-03-2002 20-03-2003 29-05-2003 07-08-2003 08-08-2002 10-10-2002
WO 0204943	A	17-01-2002	AU 7189801 A CA 2413663 A1 EP 1311848 A2 WO 0204943 A2 US 2002053915 A1	21-01-2002 17-01-2002 21-05-2003 17-01-2002 09-05-2002
WO 9964582	A	16-12-1999	US 6413776 B1 AU 756605 B2 AU 4294799 A CA 2301403 A1 EP 1022335 A1 JP 2002526031 T WO 9964582 A2 US 2003027170 A1 US 2003170633 A1 US 2003059794 A1 US 6340595 B1	02-07-2002 16-01-2003 30-12-1999 16-12-1999 26-07-2000 20-08-2002 16-12-1999 06-02-2003 11-09-2003 27-03-2003 22-01-2002
WO 0173000	A	04-10-2001	AU 8727301 A EP 1276861 A2 WO 0173000 A2 US 2001049104 A1	08-10-2001 22-01-2003 04-10-2001 06-12-2001
EP 1143013	A	10-10-2001	EP 1143013 A1 BR 0101294 A CA 2342677 A1 EP 1143017 A2 JP 2001314193 A US 2002034728 A1	10-10-2001 06-11-2001 03-10-2001 10-10-2001 13-11-2001 21-03-2002
DE 19950385	A	03-08-2000	DE 19950385 A1 AU 2799500 A WO 0044894 A1 EP 1144618 A1 JP 2002535003 T	03-08-2000 18-08-2000 03-08-2000 17-10-2001 22-10-2002
WO 9727212	A	31-07-1997	US 6365344 B1 AU 1707497 A AU 725716 B2 AU 1707897 A CA 2244222 A1 DE 69722176 D1 DK 877752 T3 EP 1295952 A2 EP 0877752 A1 JP 2000504220 T JP 2001509661 T WO 9727212 A1 WO 9727213 A1 US 6455247 B1	02-04-2002 20-08-1997 19-10-2000 20-08-1997 31-07-1997 26-06-2003 15-09-2003 26-03-2003 18-11-1998 11-04-2000 24-07-2001 31-07-1997 31-07-1997 24-09-2002

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/GB 03/02459

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9727212 A		US 6153380 A	28-11-2000
		US 2002127564 A1	12-09-2002
		US 2002146710 A1	10-10-2002
		US 2003104384 A1	05-06-2003
		US 2003044767 A1	06-03-2003
WO 0229402 A	11-04-2002	AU 9367601 A	15-04-2002
		CA 2424498 A1	11-04-2002
		WO 0229402 A2	11-04-2002
		EP 1322955 A2	02-07-2003
		US 2002063067 A1	30-05-2002
WO 0159447 A	16-08-2001	AU 3499601 A	20-08-2001
		EP 1257816 A1	20-11-2002
		WO 0159447 A1	16-08-2001
		US 2002064841 A1	30-05-2002
WO 0125769 A	12-04-2001	AU 7406500 A	10-05-2001
		CA 2385482 A1	12-04-2001
		CN 1377464 T	30-10-2002
		WO 0125769 A2	12-04-2001
		EP 1221046 A2	10-07-2002
		JP 2003511668 T	25-03-2003

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**